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Procedia - Social and Behavioral Sciences 219 (2016) 387 – 393

Procedia
Social and Behavioral Sciences

3rd Global Conference on Business and Social Science-2015, GCBSS-2015, 16-17 December
2015, Kuala Lumpur, Malaysia

The Effect of Investment to Value Added Production, Employment Absorption, Productivity, And Employees' Economic Welfare In Manufacturing Industry Sector In West Kalimantan Province

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Abstract

The findings of this research were, first, private investment had significant effect on production added value, with a positive relation. Second, private investment had significant effect on employment absorption, with a positive relation. Third, production added value had significant effect on employment absorption, with a positive relation. Fourth, production added value had insignificant effect on employee's productivity, with a positive relation. Fifth, employment had insignificant effect on employee's productive with a negative relation. Last, productivity had insignificant effect on wage rate with negative relation.

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Peer-review under responsibility of the Organizing Committee of the 3rd GCBSS-2015

Keywords: Private Investment, Production Added Value, Labour Absorption, and Employee's Economical Welfare.

1. Introduction

In West Kalimantan, the role of the industrial sector ranks third after agricultural, trade, hotels, and restaurants sector. In 2009, the industrial sector in West Kalimantan gave a significant contribution to the economy of the region, but in the last decade its role has decreased significantly. In 2000, the contribution of the industrial sector to the economy of West Kalimantan was 24.15%, but in 2009 it declined to 17.97% and was projected to fall by 14% in 2013 (Bappeda Kalbar in West Kalimantan Provincial Government, 2009).

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1.1 Background

In West Kalimantan, the role of the industrial sector ranks third after agricultural, trade, hotels, and restaurants sector. In 2009, the industrial sector in West Kalimantan gave a significant contribution to the economy of the region, but in the last decade its role has decreased significantly. In 2000, the contribution of the industrial sector to the economy of West Kalimantan was 24.15%, but in 2009 it declined to 17.97% and was projected to fall by 14% in 2013 (Bappeda Kalbar in West Kalimantan Provincial Government, 2009).

In conceptual framework of economic development, economic growth can be achieved if private investment by people increases. The increase of investment will affect economic growth, which then will affect employment and economic welfare to increase through the increase of productivity and wage rate. Based on the empirical facts of the large and medium manufacturing industries in West Kalimantan, there are gaps and variations between private investment, value added, employment, productivity and wage rate. The increased private investment increased the value-added, but did not increase employment and economic welfare. Therefore, it should be investigated and tested further the relations between private investment to value added, employment, productivity, and economic welfare (wage rate) in large and medium manufacturing industries in West Kalimantan.

1.2 Research Purpose

The purpose of the study was to examine and analyze the effect of:

1. Private investment on value added production in the large and medium manufacturing industries of West Kalimantan Province.
2. Private investment on employment in the large and medium manufacturing industries of West Kalimantan Province.
3. Value added production on employment in the large and medium manufacturing industries of West Kalimantan Province.
4. Value added production to the productivity of employees in the large and medium manufacturing industries of West Kalimantan Province.
5. Employment absorption to the productivity of employees in the large and medium manufacturing industries of West Kalimantan Province.
6. Productivity on wage rate in the large and medium manufacturing industries of West Kalimantan Province.

2. Literature Review

2.1 Basis Theory

Economic growth theory proposed by Smith basically covers the problems of (a) the division of labor, (b) the process of capital accumulation, (c) an agent of economic growth, and (d) the growth process. Smith (in Irawan and Suparmoko, 2002:23) stated that for the course of economic development requires a specialization or division of labor in order to increase labor productivity. The division of labor is associated with increased job skills, time savings in the production of goods, the discovery engine to save energy and to accelerate and increase production.

Smith (in Pressman, 2002 and Skousen, 2009) analyzed factors causing the national living standards to rise and showed how the competition itself played a role in economic growth and similarly, how the division of labor could increase worker productivity. In order to understand the Smith's process of economic growth easier, we should distinguish two main aspects of economic growth.

An outline of the growth process and the conclusions made by Ricardo was not so different from the theory of Adam Smith. The theme of the process of economic growth is still focused on race between population growth rate and the growth rate of *output*. In addition, Ricardo also assumed that the number of production land (natural resources) factors could not grow and eventually would become a limiting factor in the *output* of a society growth.

Ricardo (in Arsyad, 2010:79-80) considered fixed capital received considerable attention because capital is not only be able to increase labor productivity, but also play a role in reinforcing the production process so that production can quickly be distributed or consumed. Characteristics by Ricardo economy are as follows.

- a. Total land is limited.
- b. Labor (population) increased or decreased depending on whether the wage rate was above or below the minimum wage
- c. Capital accumulation occurred when the rate of capital was above the minimum rate of return necessary to attract them to invest.
- d. Technological advances happened all the time
- e. The agricultural sector was dominant.

According to the Solow-Swan theory (in Arsyad, 2010: 88), economic growth depends on the availability of the production factors (population, labor, and capital accumulation) supply and the level of technological progress. This view was based on the assumption that underlied classical analysis, that is the economy would continue to experience the full level of craftsmanship and capital equipment capacity would remain fully utilized all the time. In other words, the extent to which the economy will evolve depends on population growth, capital accumulation, and technological progress.

Structural change theory focuses on a mechanism that allows countries to transform the underdeveloped economic structure, from traditional subsistence agricultural economy to a more modern economy, more urban life-oriented, and has more varied manufacturing sectors. Theories that analyze the structural changes were proposed by M. Arthur Lewis with his theory of two sectors labor surplus and Hollis B. Chenery about patterns of development.

The main hypothesis of structural change models is that development is a process of growth and change that can be observed and is dependent on a number of factors that affect the development process. These factors, among others, are the number and types of natural resources, the accuracy of the series of policies and objectives set by the government, availability of capital and technology, and international trade (Todaro and Smith, 2006: 141)

John Fei and Gustav Ranis examined the transition process are expected to be bypassed an underdeveloped country to move from stagnation towards growth. This theory is a refinement of the theory of Lewis on an unlimited supply of labor. Beside that, theory by Fei-Ranis (in Jhingan, 2000) stated that in a country with excessive labor and few resource economies, people should be engaged in the agricultural sector due to a large amount of unemployment and a high population growth rate. Development here, thus, is a reallocation of agricultural labor surplus which output is zero to the industry, in which they would become productive with the same wage.

2. 2 Economic Employment

The amount of the labor supply in society is a number of people who offered his services to the production process, mostly among those who are already active in the activities that produce goods or services. They are called the working class or *employed persons*. Other criterias are ready to work and have tried to find a job. They are called job seekers or unemployed. The number of job seekers who work are called the labor force or *labor force*.

The company is an economic unit engaged in the production, while production is the transformation of inputs (factors of production) to output. Demanding company will *input* a query derivative (*derived demand*) derived from consumer demand for the company's products (Fariastuti, et.al.; 2000). That is, the more demand for goods and services, the more the demand for labor because labor is a factor of production to produce goods or services.

Bellante and Jackson (1990:47) argued that the labor demand curve in the industry is the amount of labor demanded by each firm in the industry at any given wage rate. Similarly, Sudarsono (in Subekti: 2007) stated that the demand for labor is related to the amount of labor required by a particular company or agency. Labor demand is influenced by changes in wage rate and other factors affecting demand for products.

2. 3 Theory of Economic Welfare

Basically economic welfare can be seen from the opportunity to increase utility. condition of Pareto optimum is when a consumer's satisfaction does not reduce other consumers'. (Mangkoesoebroto, 2010: 15). Thus, it can be said that the condition of Pareto optimum is achieved when an individual can improve welfare without compromising the welfare of another individual.

According to Mangkoesoebroto (2010: 16), to determine the condition of Pareto optimum, it is necessary to understand the concept of marginal exchange rate (the marginal rate of substitution or TPM). TPM is a number that

indicates the willingness of consumers to redeem a person's last unit of a good to get some other good units. Therefore, each consumer will always equate TPM - its relative price between the two goods.

According to Sudarsono (1989), high productivity can lead to higher corporate earnings as well, and will be distributed in the form of additional wages for labor so that labor will increase welfare.

3. Methods

According to Zainuddin (2009:34), a research design or implementation phases operationalization of the research process. It also means plan on how to conclude, present, and analyze data; in a sense, to give meaning to the data efficiently and effectively.

Furthermore, this study also examined the relations between independent variables (*exogenous variable*) and the dependent variables (*endogen variable*) that classify this study as the explanatory research (Ruslan, 2006:15). The population in this study were 8 (eight) sub-manufacturing industries registered at the Department of Industry, West Kalimantan, with the following industry codes.

- Code 15: Food and Beverage Industry
- Code 20: Manufacture of Wood, Products of Wood and Wicker
- Code 22: Industrial Publishing, Printing and Reproduction of Recording Media
- Code 24: Chemicals and Industrial Goods from Chemicals
- Code 25: Manufacture of Rubber and Rubber
- Code 26: Industrial Goods Excavation addition Metals
- Code 18, 27, 35: The Garment Industry, Primary Metals Except Machinery and Equipment
- Code 36: Manufacture of *Furniture* and Other Manufacturing

The sample is part of the number and characteristics possessed by the population (Sugiono, 2009:62). Given that not all populations have the same characteristics and complete data, not all populations could be studied. In this study, there were several sub-sectors that the data were not sequential and several subsectors which had different criterias, so we took few samples. The samples taken were the ones which met the criteria, which were 6 (six) sub-sectors of manufacturing industry.

Beside using cross section which consisted of 6 (six) sub-sectors, which also used *time series* data along 12 years. Combination of *cross section* data and *time series* is called panel data. Therefore, the number of manufacturing sub-sample $6 \times 12 \text{ years} = 72 \text{ observations}$.

This study used quantitative and qualitative analysis techniques. Quantitative analysis techniques used to answer the research objectives 1 to 6. The quantitative analysis techniques used in this study consisted of:

1. Descriptive Analysis.
2. Path Analysis. hypothesis testing in this study used path analysis. The analysis technique used SPSS (*Statistical Package for Social Science*) software

4. Analysis of Study

Based on the hypothesis test can be presented path coefficients of each - each influences between variables, in Table 4. 1 following.

Table 4. 1 Hypothesis Test Results

Influence Between Variables		Beta	Sig (P - Value)	Information
Variable-Free	Dependent Variable			
Investment	Value of Production	0.290	0.033	Significant
Investment	Employment	0.388	0.001	Significant
Value of Production	Employment	0.423	0.000	Significant
Value of Production	Productivity	0.023	0.890	Insignificant
Employment	Productivity	- 0.136	0.411	Insignificant
Productivity	Wage Rate	0.423	0.000	Insignificant

Source: Results of Operations SPSS, 2015

5. Discussion

5.1 Effect of Private Investment on Value Added Production

Testing the hypothesis about the influence of private investment to value added production by the method of path resulted significance probability value (*sig*) of 0.033, lower than level of significance (α) 0.05, which means the relation was significant. These results, therefore, confirmed hypothesis that significant private investment to value added production. The findings indicated that the private investment contributed greatly to the value-added production in the industry. Path coefficients (beta) with a value of 0.290 was positive. That means if private investment increases, the value-added production also increases and vice versa.

The significant effect of private investment to value added production shows that private investment embedded in a large manufacturing industry in West Kalimantan for working capital and fixed capital enable to increase its production capacity as to increase the *output* and value added in all industrial sub-sectors. Similarly, the longer the derivatives industry, the higher the added value of the industrial production.

Investment is one of the determinants of economic growth. In private investment, capital accumulation process as part of the income is not distributed but reinvested to improve and expand production capacity. With the increase in production capacity, then *output* can be increased and create greater added value to the derivatives industry term. Thus, greater profits in future could be expected.

5.2 Effect of Private Investment on Employment

Based on the hypothesis testing about the effect of private investment on employment using path analysis model, it resulted that the significant probability value was 0.001, lower than significance level (see Table 4.1). Thus, it can be stated that effect of private investment on employment is significant in large and medium manufacturing industries in West Kalimantan.

The positive path coefficient indicates that the relationship is not in the same direction, means that the higher private investment, the higher the employment, and vice versa. These results would indicate that the role of private investment in job creation is to reduce unemployment. Role of private investment therefore meets national industrial development goals, both medium and long term, which is to increase employment in the industrial sector. Employment in the manufacturing sector continues to increase even though not as high as in the agricultural sector (Idris; 2010).

5.3 Effect of Value Added Production on Employment

The result of the influence of value-added production on employment with path analysis showed a probability value of significance (*sig*) of 0.000, lower than the significance level (α) 0.05. Results prove that the hypothesis of value-added production significantly affect employment the large and medium manufacturing industry in West Kalimantan is confirmed. It appears also that the path coefficient (beta) indicates a positive relation. That means that the higher value-added production, the higher number of workers absorbed.

Value added production could significantly influence employment because the value-added production is able to bring increasing demand for goods and services industry to push the amount of labor absorbed.

The study result showed that the increased value-added production improved manufacturing sector. The development of the manufacturing industry was able to absorb greater proportion of the workforce. Manufacturing sector, therefore, ought to be developed for an important role in accommodating and reduce the burden on the agricultural sector which is very hard.

5.4 Effect of Value Added on Productivity

Based on the hypothesis test result with path analysis, it can be concluded that the insignificant result was due to

the significance probability value of 0,890 which was higher than significance rate (α) of 0,05 and positive beta value (path coefficient) of 0,023. Based on the test, hypotheses stated that value added significantly affect productivity is rejected. The positive relation means that the higher the value added, the higher the employee's productivity. But, in this context, the relation is not significant.

The insignificant relation between value added and productivity represents that production value added growth is not followed by similar growth in productivity. Value added increases faster than productivity; means that increased value added does not automatically increase employee's productivity. This is due to the fact that productivity is heavily influenced by various factors, including ability, skill, experience, work condition, and so forth.

5.5 *Effect of Employment on Productivity*

Based on the hypothesis test about the effect of employment on productivity through path analysis, significance probability value was 0,411, higher than α of 0,05 and beta of -0,136. That result means that employment affect negatively and insignificantly to the employee's productivity in large and medium-scale manufacturing industries in West Kalimantan.

The insignificant effect of employment on productivity can take place due to the low productivity, although the trend is high. It also can take place due to the high number of employees, but have not fully worked and the result is not optimal, so that the productivity does not increase significantly.

5.6 *Effect of Productivity on Wage Rate*

The test showed insignificant result. This could mean that productivity movement is not followed by the wage rate's movement. Wage rate is usually given based on the government's policy about minimum wage. Generally, the wage rate determined by companies refers to the policy and most of the subsectors have paid above the minimum wage rate.

6. Conclusion

Local government of West Kalimantan should build synergy between the development of agriculture sector and manufacturing industrial sector in order to contribute significantly to the economic growth. In other words, economic activity should not only be seen as planting activity, but an activity which gives value added in downstream industries.

This study showed the huge effect of private investment to the production value added and employment absorption; or, in different words, private investment was able to increase output and job creation. However, in general private investment in manufacturing industries in West Kalimantan was still low. Government, therefore, should promote the increase of investment, especially to focus on working capital so it could directly increase employment opportunity. The investment promotion can be done through the improvement of business environment, supporting policies and regulations, and the comprehensive information and promotion system. In addition, government should give concern to infrastructure in order to improve production factors mobility and the flow of goods and services.

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